

Remarks

The allowability of claims 19 and 20 is acknowledged. Favorable reconsideration of this application is requested in view of the following remarks. For the reasons set forth below, Applicant respectfully submits that the claimed invention is allowable over the cited references.

The non-final Office Action dated January 8, 2004, indicated that claims 1, 3-18 and 21 are rejected under 35 U.S.C. § 112, first paragraph, and that claims 1, 3-18, and 21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Grimbergen et al.* (U.S. Patent No. 6,081,334) in view of *Witek et al.* (U.S. Patent No. 5,627,395).

With respect to the rejection of claims 1, 3-18 and 21 under 35 U.S.C. § 112, first paragraph, Applicant respectfully traverses the rejection. Without further clarification, Applicant submits that the Office Action presents two theories to support the rejection as follows: (1) the claims are “based on a disclosure which is not enabling”; and (2) the claims do not set forth the disclosure’s first and second etch chemistries which are critical to the claimed process; therefore, the “claims do not reasonably provide enablement.”

Applicant submits that these two theories are contradictory and therefore untenable. In connection with the second of the above two theories, the Office Action concludes that the disclosure’s first and second etch chemistries are critical to the claimed process. Without further explanation, Applicant submits that it would be reasonable to assume that the Examiner has reached this conclusion based solely on reading Applicant’s disclosure; in other words, based on Applicant’s disclosure, the second theory assumes that the first and second etch chemistries are critical to the claimed process, and that the claimed process cannot be successfully practiced without the first and second etch chemistries described in the disclosure. As such, the second theory relies on an enabling teaching of an embodiment in the disclosure to argue the first theory: that the claims are “based on a disclosure which is not enabling.” Thus, the first and second theories contradicts one another, thereby making the overall rationale for the §112 rejection untenable.

Moreover, the second theory contradicts the law as properly interpreted under 35 U.S.C. §112, which does not require the claims to provide enablement. As stated by the Court in *Engel Industries, Inc. v. Lockformer Co.*, 946 F.2d 1526 (Fed. Cir. 1991), “[t]he

enablement requirement is met if the description enables any mode of making and using the claimed invention.” Similarly, in *Scripps Clinic & Research Foundation v. Genetech Inc.*, 927 F.2d 1565 (Fed. Cir. 1991), the Court explained that the enablement provision is to assure that the inventor provides sufficient information about the claimed invention so that it can be practiced relying on the specification, rather than the claims, without undue experimentation. From Applicant’s description, the Examiner impliedly acknowledges that Applicant has disclosed at least one mode of making and using the claimed invention. Therefore, the enablement requirement is met and the rejection should be withdrawn.

Applicant further submits that the second theory is flawed and not consistent with a proper interpretation of 35 U.S.C. § 112, first paragraph. Under §112, first paragraph, there is no requirement that the claims provide enablement. The relevant portion of 35 U.S.C. § 112, first paragraph, states that the specification, rather than the claims, shall contain a written description that enables the invention to be practiced. This is consistent with the above-mentioned holdings including *Engel Industries, Inc. v. Lockformer Co.*, 946 F.2d 1526 (Fed. Cir. 1991), “[t]he enablement requirement is met if the description enables any mode of making and using the claimed invention.”

Moreover, the case cited in connection with the §112 rejection is in support of Applicant’s position. While a factually-intensive case concerning multiple rejections, the most applicable facts of *In re Mayhew*, 527 F.2d 1229 (CCPA 1976), concerned whether or not the claims should be required to recite the temperature of the zone of cool spelter bath or the function thereof. The Court of Customs and Patent Appeals, Rich, J., held that the Board erroneously affirmed the examiner’s rejection of claims which failed to recite the temperature of the zone of cool spelter bath or the function thereof.

In view of the above, Applicant request that the rejection of the claims under §112, first paragraph, be withdrawn.

Applicant also respectfully traverses the rejection under 35 U.S.C. §103. The subject matter set forth in each of the independent claims (as well as the dependent claims when taken alone or with the inherited language of the underlying independent claims) does not correspond to the asserted prior art, and the asserted prior art does not suggest that a skilled artisan would implement the combination as asserted in the Office

Action. As is addressed more fully below, neither the '334 patent nor the '395 patent teaches use of a particular amount of nitrogen that would minimize notching as claimed by Applicant. Moreover, there is no evidence in support of the notion that a skilled artisan would combine any aspect of these teachings and thereby reconstruct the claimed invention. Because such correspondence and suggestion are requirements for establishing a *prima facie* rejection under §103, Applicant submits that the rejection should be removed.

More particularly, Applicant submits that the Office Action has mistakenly interpreted the '395 patent in an improper attempt to reconstruct Applicant's invention. The Office Action alleges that the skilled artisan would be led by the prior art to combine the teachings from the '334 and '395 patents in order to implement Applicant's invention and therein minimize notching without affecting selectivity, as claimed. However, the Office Action acknowledges that the '334 patent does not teach using any amount of nitrogen in its second etching chemistry. And, in an attempt to address this deficiency, the Office Action resorts to an unrelated general comment in the '395 patent about different types of oxides that have been used for various (nonspecific) etching goals. Although no citation is provided in the Office Action, the Office Action appears to be relying on the following comment from the '395 patent: "In general, oxides may be etched using, for example, a CHF.sub.3 and O.sub.2 plasma or a C.sub.2 F.sub.6 plasma. Polysilicon may be etched using an HBr and Cl.sub.2 plasma or a CF.sub.4 /oxygen environment. Silicided layers may be etched via a chlorine HBr ambient. In addition, some silicon-containing materials are etched in an SF.sub.6 and oxygen environment. Other known etch chemistries exist. Any of the above stated plasma environments may contain one or more inert carrier gases such as Ar, H.sub.2, He, N.sub.2, or a like inert carrier gas." See the '395 patent, column 5, lines 24-33. Accordingly, neither the '334 or '395 patent discusses using any amount of nitrogen in a secondary etch chemistry to minimize notching without affecting selectivity, as claimed; therefore, the combined teachings of the '334 and '395 patent cannot be fairly relied upon to reconstruct Applicant's invention and maintain a *prima facie* case under §103.

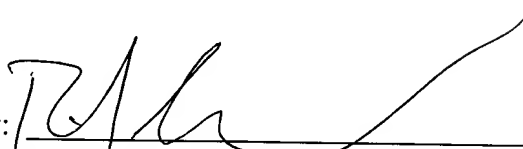
In addition to a lack of correspondence between the claimed invention and the combined prior art, the §103 rejection must fail for lack of the requisite evidence that the

skilled artisan would have led by the prior art to combine the teachings as asserted in support of the §103 rejection. As explained in *Ruiz v. A.B. Chance Co.*, 234 F.3 654 (December 6, 2000), the alleged motivation for combining the references is to be suggested by the *references* (“Our court has provided [that the] motivation to combine may be found explicitly or implicitly: 1) in the *prior art references* themselves; 2) in the knowledge of those of ordinary skill in the art that certain *references*, or disclosures in those references, are of special interest or importance in the field; or 3) from the nature of the problem to be solved, ‘leading inventors to look to *references* relating to possible solutions to that problem.’”). Applicant respectfully submits that the supporting rationale provided in the Office Action is based on mere conjecture as to the equivalence between the two identified chemistries in achieving the goal of minimize notching without affecting selectivity, as claimed. Should the Examiner be relying upon allegedly well-known prior art that would equate these chemistries for this purpose, Applicant traverses and requests that documentation of this proposition be provided as required by MPEP § 2144.03.

Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Mr. Peter Zawilski, of Philips Corporation at (408) 474-9063.

Please direct all correspondence to:

Corporate Patent Counsel
Philips Intellectual Property & Standards
1000 West Maude Ave., W2-755
Sunnyvale, CA 94085-2810

By: 
Name: Robert J. Crawford
Reg. No.: 32,122
(VLSI.268PA)

CUSTOMER NO. 24738